



## **GIET UNIVERSITY, GUNUPUR – 765022**

B. C. A (Fourth Semester) Examinations, May - 2024

## **BCA20403 - Computer Networks**

Time: 3 hrs Maximum: 70 Marks

The fi	gures in	the ris	ght hand	margin	indicate	marks.
111011	<b>5</b> 41 CD 111	,		11141 5111	mucuc	11161 1701

PART – A: (Multiple Choice Questions) (1 x 10 = 10 Marks)							
Q. 1 Answer ALL questions					CO#	PO#	
		•			CO1	PO1	
a.		nds for	::		COI	POI	
		Open system interconnection	ii. :	Operating system interface			
1		Optical service implementation	iv.	Open service internet	CO1	PO1	
b.		stands for:	::	Minimum Anna Naturali	COI	POI	
	i. iii.	Metropolitan Area Network Main Area Network	ii.	Minimum Area Network Maximum Area Network			
0	111.		iv.	Maximum Area Network	CO2	PO1	
c.	i.	topology requires a multipoint cor Star	ii.	Mesh	202	101	
.1	iii.	Ring	iv.	Bus	CO2	PO1	
d.	i.	_ is based on coding theory FDMA	ii.	TDMA	CO2	101	
	ı. iii.	CDMA	iv.	TDMA None			
Δ		olication layer protocol used by a Telnet a			CO1	PO1	
e.	i.	Telnet	ippiication is ii.	FTP	201	101	
	iii.	HTTP	iv.	SMTP			
f.				SWITE	CO3	PO1	
1.	i.	ire hostname has a maximum of 255	 ii.	127	C03	101	
	iii.	63	iv.	31			
σ		ands for	IV.	31	CO3	PO1	
g.	i.	User Datagram Protocol	ii.	User Defined Protocol		101	
	iii.	Union Data Protocol	iv.	User Data Protocol			
h.		rver listens for connection on port number		Oser Data Protocor	CO4	PO1	
11.	i.	20	ii.	21			
	iii.	22	iv.	23			
i.		size of DES is:			CO4	PO1	
		56 bits	ii.	64 bits			
	iii.	128 bits	iv.	168 bits			
j.	Which	of the following is TELNET comman	nd?		CO4	PO1	
	i.	WILL	ii.	ls			
	iii.	pwd	iv.	find			
PART – B: (Short Answer Questions) (2						x 10 = 20 Marks)	
				· ·		ŕ	
<u>C</u>	).2. Answ	ver ALL questions			CO #	PO#	
	a. Diffe	erentiate between LAN, MAN and W	ΔN		CO1	PO1	
					CO1	DO2	
b. Write the two responsibilities of data-link layer.						PO2	

	c. What is flow control and error control?		CO2	PO1		
	d. What is Bridge? How it works?		CO2	PO1		
	e. What is IPv4 and IPv6?		CO2	PO1		
	f. Which layers are missing in TCP/IP model?		CO3	PO2		
	g. Define TCP.		CO3	PO1		
	h. Explain FTP Protocol.		CO3	PO1		
	i. Write a short note on UDP.		CO4	PO1		
	j. What is DHCP?		CO4	PO2		
PART – C: (Long Answer Questions)				$(10 \times 4 = 40 \text{ Marks})$		
	ATT	Marks	CO#	PO#		
Answ	ver ALL questions					
3.a.	What is the difference between simplex, half-duplex and full-duplex transmission modes?	5	CO1	PO1		
b.	Explain different types of switching techniques.	5	CO1	PO2		
	(OR)					
c.	Explain all the layers of OSI Model briefly.	10	CO1	PO2		
4.a.	How Go-back-N ARQ s different from stop and wait ARQ?	10	CO2	PO1		
	(OR)					
b.	Explain the Point to Point Protocol in detail.	5	CO2	PO2		
c.	What is the difference between random access and control access?	5	CO2	PO3		
5.a.	What is Bluetooth explain briefly with its architecture.	10	CO3	PO2		
	(OR)					
b.	What is Ethernet? Explain different types of Ethernet.	10	CO3	PO2		
6.a	Explain working of ARP In detail.	5	CO4	PO1		
b.	Explain TCP briefly.	5	CO4	PO1		
	(OR)					
c.	Define User Datagram Protocol. Explain the working of User Datagram Protocol briefly.	5	CO4	PO1		

What is internetworking? Explain its types.

5

CO4

PO1